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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,305	11/14/2003	Clemens Jung	IT20030012	1221

173 7590 10/13/2006

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EXAMINER

EL ARINI, ZEINAB

ART UNIT PAPER NUMBER

1746

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/713,305	Applicant(s) JUNG ET AL.	
	Examiner Zeinab E. EL-Arini	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,8,24-32 and 34-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,8,24-32 and 34-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment and remarks filed 3/30/06 have been acknowledged and entered.

Claim Rejections - 35 USC § 112

1. The rejection under the first paragraph of 35 U.S.C. 112 has been withdrawn in view of applicant's amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 8, 24-32 and 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bashark (3,888,269) in combination with Smith et al. (5,586,567).

Bashark discloses control system for dishwasher. The reference discloses that in Patent No. 3,279,481, a turbidity sensor is used to determine the turbidity of the rinse water. See col. 1, lines 60-67. The reference discloses sensing the turbidity of the dish treating liquid after the pump has been operating for a selecting period of time such as after one minute of the first rinse period. See col. 3, lines 3-20, and lines 49-68, and col. 4, lines 1-7, 36-46.

Bashark does not teach determining the degree of soiling of the rinse liquid by determining the turbidity values corresponding to the recirculation of the liquid in the lower and upper spray plane as claimed.

Smith et al. teach a turbidity sensing mechanism for a dishwasher. The reference also discloses the turbidity is a measure of the suspended and/or soluble soils in the fluid. See col. 3, lines 51-53. The reference discloses recirculation of the liquid in the lower and upper spray plane.

It would have been obvious for one skilled in the art to use the lower and upper spray plane, and turbidity sensing mechanism taught Smith et al. in the Bashark process to obtain the claimed process. This is because both references are from the same technical endeavor, which is using the turbidity sensor to determine the turbidity of the rinse water. This is also because the steps of measuring the turbidity as taught by Bashark will include determining the solubility of the soil as claimed. See Smith et al., col. 3, lines 51-53. This is also because the degree of turbidity depends on the amount of soil been found on the dishes. See Bashark, col. 3, lines 3-20.

Response to Arguments

Applicant's arguments with respect to Smith discloses measuring the turbidity of the liquid in the sump, and the combination of the references does not determine turbidity values corresponding to the recirculation of the liquid in the lower spray plane and the upper spray plane, respectively, is unpersuasive. This is because determining the turbidity values corresponding to the recirculation of the liquid in the lower and upper

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spray plane, is equivalent to determining the turbidity in the sump. This is because the liquid in both cases will re-circulate through the sump. This is also because the degree of turbidity depends on the amount of soil been found on the dishes. See Bashark, col. 3, lines 3-20. Bashark also discloses modifying wash and rinse cycles based upon the amount of turbidity, which is a measure of soluble soil in the liquid.

With respect to determining the turbidity values is inherent in Smith and Bashark process, because both Smith and Bashark system are capable of performing the determining step as claimed.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeinab E. EL-Arini whose telephone number is (571) 272-1301. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zeinab E. EL-Arini
Zeinab E. EL-Arini
Primary Examiner
Art Unit 1746

ZEE
10/10/06